

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 8 (cancelled)

Claim 9 (original): A method for forming an organic photovoltaic device, comprising:

synthesizing photovoltaic block copolymer samples;
dissolving the photovoltaic block copolymer samples in a solvent;
filtering the copolymer-solvent mixture;
forming a film of the copolymer-solvent mixture on a prepared surface; and
removing the solvent.

Claim 10 (original): The method of claim 9 wherein the photovoltaic block copolymer samples are synthesized by:

individually synthesizing conjugated donor chains, conjugated acceptor chains and non-conjugated bridge chains;
combining the non-conjugated bridge chains with the conjugated donor chains to form a plurality of bridge-donor-bridge units; and
combining the bridge-donor-bridge units with the conjugated acceptor chains.

Claim 11 (original): The method of claim 9 wherein the photovoltaic block copolymer samples are synthesized by:

individually synthesizing conjugated donor chains, conjugated acceptor chains and non-conjugated bridge chains;
combining the non-conjugated bridge chains with the conjugated acceptor chains to form a plurality of bridge-acceptor-bridge units; and
combining the bridge-acceptor-bridge units with the conjugated donor chains.

Claim 12 (currently amended): The method of claim 9 wherein the solvent is ~~easily dried~~ removed by drying.

Claim 13 (original): The method of claim 9 wherein the copolymer-solvent solution is filtered using a filter having a pore size of about 0.2 microns.

Claim 14 (original): The method of claim 9 wherein the film is formed by a method selected from the group consisting of spin coating and drop drying.

Claim 15 (original): The method of claim 9 wherein the prepared surface is precleaned, conducting glass.

Claim 16 (original): The method of claim 9 wherein the solvent is removed by a method selected from the group consisting of heating, vacuum exposure and a combination of heating and vacuum exposure.

Claim 17 (original): The method of claim 9 further comprising, subsequent to removing the solvent, the following steps:

heating the device; and

applying, to the device, a force selected from the group consisting of magnetic, electrical and optical.

Claim 18 (original): A method for forming an organic photovoltaic device, comprising:

immersing a portion of a piece of conducting glass in a concentrated sulfuric acid cleaning solution;

cleaning the entire piece of conducting glass;

synthesizing a photovoltaic block copolymer from conjugated donor chains, conjugated acceptor chains and non-conjugated bridge chains;

spin coating the piece of conducting glass with the photovoltaic block copolymer to form a film having a thickness of about 100nm; and

vacuum depositing an electrode material on top of the film wherein the electrode material has a thickness of about 100nm, such that a positive electrode and a negative electrode are formed.

Claim 19 (currently amended): The method of claim 18 further comprising:

forming one or more films of one or more carrier collection ~~enhancing~~ materials between the photovoltaic block copolymer ~~film~~ and the electrodes.

Claim 20 (currently amended): The method of claim 19 wherein the carrier collection ~~enhancing~~ materials are selected from the group consisting of lithium fluoride and poly(ethylene dioxythiophene)/ polystyrene sulfonic acid.

Claim 21 (original): The method of claim 18 further comprising:
forming a film synthesized from donor chains between the positive electrode and the photovoltaic block copolymer film; and
forming a film synthesized from acceptor chains between the negative electrode the photovoltaic block copolymer film.

Claim 22 (new): A method for forming an organic photovoltaic device, comprising:
providing a substrate having a conducting layer;
removing the conducting layer from a portion of the substrate;
cleaning the substrate using a cleaning solution;
synthesizing a photovoltaic block copolymer from conjugated donor chains, conjugated acceptor chains and non-conjugated bridge chains;
spin coating the photovoltaic block copolymer onto the substrate to form a film; and
vacuum depositing an electrode material on top of the film, such that a positive electrode and a negative electrode are formed.

Claim 23 (new): The method of claim 22 further comprising:
forming one or more films of one or more carrier collection materials between the photovoltaic block copolymer film and the electrodes.

Claim 24 (new): The method of claim 22 further comprising:

forming a film synthesized from donor chains between the positive electrode and the

photovoltaic block copolymer film; and

forming a film synthesized from acceptor chains between the negative electrode the photovoltaic

block copolymer film.

Claim 25 (new): The method of claim 9 wherein the photovoltaic block copolymer samples
are synthesized by:

 individually synthesizing conjugated donor chains, conjugated acceptor chains and non-
 conjugated bridge chains;

 combining the non-conjugated bridge chains with the conjugated donor chains to form at
 least one first unit from the group of bridge-donor-bridge or bridge-donor units; and

 forming at least one second unit by combining at least one conjugated acceptor chain
with the at least one first unit at a non-conjugated bridge chain.

Claim 26 (new): The method of claim 9 wherein the photovoltaic block copolymer samples
are synthesized by:

 individually synthesizing conjugated donor chains, conjugated acceptor chains and non-
 conjugated bridge chains;

 combining the non-conjugated bridge chains with the conjugated acceptor chains to form
 at least one first unit from the group of bridge-acceptor-bridge or bridge-donor units; and

forming at least one second unit by combining at least one conjugated donor chain with the at least one first unit at a non-conjugated bridge chain.